# Silicon Rush Proposal

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### **G-KnowMe**

To develop a web application that delivers the utility of taking in camera images of medical reports and extracting the test results displayed using image processing and OCR

- Web development
- Image processing



**Medical record digitization** is all about storing the patient details in software. This eliminates the record-keeping in files and comes with multiple advantages to the healthcare professionals like:

- Accuracy
- Security
- Effective Storage
- Efficient & Eco-friendly

### Solution

O1

Text - recognition

Using image-processing(OCR) to digitize medical records

02

#### **Data - Storage**

Transferring the extracted information into a database(MongoDB)



### Frontend Web-design

The UI and client-side functionalities to analyze the medical records



#### **Backend-Design**

Constructing a solution for smooth delivery of client requests, that enable the end user to access the data extracted, i.e., the medical records and its manipulation.

### Solution Appendix

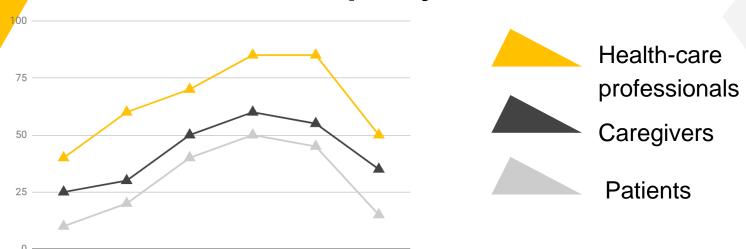
The product is a web application that is aimed at facilitating the presentation of medical records in an organised manner which also enables filtering the required set of data by tabulating, cropping and classifying the records based on the user's requirement.

# <u>Requirements</u>

### **Software stack**

- For Web-Dev:
  - Front-end: HTML5,CSS,JavaScript,React
  - Back-End: MongoDB, Express, React.JS, Node.JS
- For Image Processing Python (Pytesseract library and Open CV)

### <u>Deployment</u>



- We aim to target medical professionals by providing them a platform which can substantially improve report analysis.
- Can be scaled to small clinics all the way up to large multi-facility health centers.
- Digitization of health records will improve the speed and quality of diagnosis and keeping track patients' medical history.

## **Bibliography**

#### Links:

 https://analyticsindiamag.com/how-to-useopencv-to-extract-information-from-tableimages/

 https://towardsdatascience.com/extracttext-from-image-using-python-8e8cfbbce743